Alfred Getz vei 3, 7491 Trondheim, Norway Faculty of Architecture and Fine Art, NTNU Light & Colour Group

> "Advanced Lighting Solutions for Retrofitting **Buildings**"

5th Industry Workshop



cc: Barbara.matusiak.ntnu.no

Return Address

SHC Task

Workshop - Topic

Retrofitting of lighting solutions in non-residential buildings

Date

Monday, 16 March 2014, 9.00-12:45 (lunch 12:45-13:30)

Location

Hotel Brosundet, Apotekergata 5, 6004 Ålesund, Norway

Registration

Participation fee: EUR100 (NOK900) including lunch and coffee (no extra fee for Task 50 meeting participants)

Mandatory Registration

The registration is open until 6 March 2015

Limitation of participants: 40

Cancellation policy: Fees will be returned to the participant if cancellation is made before 6 March 2015. For later cancellations, the full fees will be charged to the participant.

Information

Additional information on Task 50 and the workshop can be found under:

http://task50.iea-shc.org/

The access route to Hotel Brosundet can be found here: http://www.brosundet.no/en/contact/map-and-directions

Organization

Fredrik Martens Onarheim

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Faculty of Architecture and Fine Art, NTNU Alfred Getz vei 3 7491 Trondheim, Norway

Supported by the Norwegian Research Council





IEA-SHC Task 50

"Advanced Lighting Solutions for **Retrofitting Buildings**"



5th Industry Workshop

16 March 2015

Hotel Brosundet Apotekergata 5 6004 Ålesund, Norway

http://task50.iea-shc.org/

IEA SHC Task 50

Lighting accounts for approx. 19% (~3000 TWh) of the global electric energy consumption. Without essential changes in policies, markets and practical implementations it is expected to continuously grow despite significant and rapid technical improvements like solid-state lighting, new facade and light management techniques.

With a small volume of new buildings, major lighting energy savings can only be realized by retrofitting the existing building stock. Many countries face the same situation: About 75 % of the lighting installations are considered to be out of date (older than 25 years). Compared to existing installations, the majority of new solutions allow a significant increase in efficiency – easily by a factor of three or more – going along with highly interesting payback times. However, lighting refurbishments are still lagging behind compared to what is economically and technically possible and feasible.

Task 50 targets building owners (investors), authorities, industry and consultants by providing strategic, technical and economic information and by supporting stakeholders overcome barriers in retrofitting lighting installations. The overall objective of this Task is thus to accelerate retrofitting of daylighting and electric lighting solutions in the non-domestic sector using cost-effective, best practice approaches, which can be used on a wide range of typical existing buildings.

The scope of Task 50 is on general lighting systems for indoor environments. The focus is on lighting appliances in non-domestic buildings. Technically, Task 50 addresses daylight utilization through better façade/roof technologies and architectural solutions, electric lighting schemes as well as lighting control systems and strategies.

Objectives of the workshop

- Task experts will inform about general lighting retrofit issues and possible solutions
- General experience exchange between industry and research
- Obtain feedback from industry and learn about practitioners' needs, for successful continuation of the work within IEA SHC Task 50

Agenda

0.00 0.10

Wolcome and coffee

9:00-9:10	Welcome and coffee
9:10-9:25	Advanced lighting solutions for retrofitting buildings: Introducing IEA SHC Task 50 Jan de Boer, Fraunhofer IBP, Germany
9:25-9:45	Energy saving through retrofitting lighting systems in Norway Tor Mjøs, Norconsult
9:45-10:05	Relighting led: Technology reconnaissance for a test case Arnaud Deneyer, Belgian Building Research Institute (BBRI), Belgium
10:05-10:25	Daylighting control in renovated buildings Knut Marius Fosse, Glamox ASA
10:25-10:45	The role of different stakeholders in lighting retrofits – a lighting designers perspective as basis for the LRA Johan Röklander, WSP Ljusdesign; Sweden
10:45-11:00	Coffee break
11:00-11:20	Experience from renovation projects Morten Berg, Itech AS
11:20-11:40	Lighting Retrofit Case Studies in Brasilia Clàudia Naves David Amorim, University of Brasilia, Brazil.
11:40-12:00	Retrofitting of glazed facades, including the Town Hall in Ålesund Kjell Beite, HRTB architects
12:00-12:20	Structure of the lighting retrofit adviser Simon Wössner, Fraunhofer IBP, Germany
12:20-12:45	Panel discussion (Chair: B. Matusiak and J. de Boer)
12:45-13:30	Lunch

Registration

IEA-SHC Task 50

"Advanced Lighting Solutions for Retrofitting Buildings"

5th Industry Workshop

Title / Name:	
Organization:	
Address for invoice (company address):	
Address for invoice (company dual-050).	
UID Nr. (VAT ID):	
Tel:	
Email:	
Signature:	
Please specify allergies or other special eating requirements if any (vegetarian, vegan, etc.):	

Please return this sheet at the latest on 6 March 2014

preferably **by Email** to Fredrik.martens.onarheim@ntnu.no with cc Barbara.matusiak@ntnu.no